

EVM COST PERFORMANCE REPORT DATA REQUIREMENTS DESCRIPTION (DRD)

1. **PROGRAM:**
2. **DRD NO.:**
3. **DATA TYPE:** 2
4. **DATE REVISED:**
5. **PAGE:** 1/1
6. **TITLE:** Cost Performance Report (CPR)
7. **DESCRIPTION/USE:** This report consists of five formats containing data for measuring contractors' cost and schedule performance on the NASA _____ acquisition contract. Format 1 provides data to measure cost and schedule performance by product-oriented Work Breakdown Structure (WBS) elements, the hardware, software, and services the Government is buying. Format 2 provides the same data by the contractor's organization (functional or Integrated Product Team (IPT) structure). Format 3 provides the budget baseline plan against which performance is measured. Format 4 provides staffing forecasts for correlation with the budget plan and cost estimates. Format 5 is a narrative report used to explain significant cost and schedule variances and other identified contract problems and topics. CPR data shall be used by NASA program managers to: (1) integrate cost and schedule performance data with technical performance measures, (2) identify the magnitude and impact of actual and potential problem areas causing significant cost and schedule variances, and (3) provide valid, timely program status information to higher management. The CPR is a management report. It provides timely, reliable summary-level data with which to assess current and projected contract performance. The CPR's primary value to the Government is its ability to reflect current contract performance measurement status and reasonably project future contract performance. It is important that the CPR be as accurate as possible so it may be used for its intended purpose, which is to facilitate informed, timely decisions. It will be used by the NASA component staff, including project and program managers, engineers, cost estimators, and financial management personnel, to confirm, quantify, and track known or emerging contract problems and serve as a basis for communicating with the contractor. The CPR data shall accurately reflect how work is being planned, performed, and measured and shall be consistent with the actual contract status.
 - a. This Data Requirements Document (DRD) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the contract.
 - b. The CPR shall be used to obtain cost and schedule performance information on contracts requiring compliance with the American National Standards Institute/Electronic Industries Alliance Standard 748 (ANSI/EIA-748), Earned Value Management Systems (EVMS) (current version in effect at time of contract award). Refer to the Federal Acquisition Regulation (FAR) or Federal Acquisition Regulation Supplement clause on contract. The CPR data elements shall reflect the output of the contractor's ANSI/EIA-748 compliant integrated management system.
 - c. The CPR shall be required no less frequently than monthly. All formats shall be submitted to the procuring activity no later than 12 working days following the contractor's accounting period cutoff date. Reports shall reflect data either as of the end of the calendar month or as of the contractor's accounting period cutoff date, provided it is consistent with the IMS. Unless otherwise provided in the contract, data reported in the CPR shall pertain to all authorized contract work, including both priced and unpriced effort.
 - d. Submission of Format 1 using a product-oriented WBS in accordance with the Program WBS is mandatory.

e.1 The CPR is a crucial element of NASA's Continuous Cost-Risk Management (CCRM) process (Step 9) providing the government Project Manager high quality, timely cost-risk feedback for cost management improvement. (see NPR 7120.5C Appendix M: CCRM Definition) Earned value cost performance data for medium and high-risk WBS elements listed below shall be reported on CPR Formats 1 & 2 (see NPR 7120.5C 3.4.3.2.a (6)) without narrative explanations until such time as both government project management and the contractor agree that they no longer represent medium or high risks. This reporting should be at a level that is adequately sensitive to performance measurement indicators to ensure earliest identification of cost and schedule problems caused by the source risks. If these medium and high-risk WBS elements do not apply to the contractor's specific design, the contractor is not obligated to report on them.

(INSERT MEDIUM AND HIGH RISK WBS ELEMENTS FROM GOVERNMENT COST ESTIMATE HERE)

The contractor shall identify all known medium and high-risk WBS elements specific to his design if not provided in the list above and report their performance measurement on CPR Formats 1 & 2. The government reserves the right to amend the above list in the final RFP, at the appropriate time during source selection, at Final Proposal Revision, and at any time during the effort as new information on risks becomes available. CPR reporting for (either insert "all" or specific WBS elements here) WBS elements shall be at level (insert level here). The Government and the contractor shall periodically review and adjust as necessary WBS reporting levels on CPR Formats 1 & 2 to ensure they continue to provide appropriate visibility without requiring excessive information. If there is a significant problem at a lower level, detailed reporting for that WBS element shall be required until the problem is resolved.

e.2 Formats 1 and 5 are mandatory in all cases and Formats 2, 3 & 4 are mandatory in most cases. (Note: If the government elects to relax the requirement for Formats 2, 3 & 4 it should so state in definitive language in this DRD).

e.3 Variance analysis thresholds which, if exceeded, require problem analysis and narrative explanations in Format 5. The variance thresholds are listed in para 13 below. Variance analysis thresholds shall be reviewed periodically and adjusted as necessary to ensure they continue to provide appropriate visibility.

e.4 The contractor will report the same organizational categories for Formats 2 & 4. The contractor may request different categories with rationale but the government reserves the right to make the final decision

8. **DISTRIBUTION:** Per Contracting Officer's letter

9. **INITIAL SUBMISSION:** 90 Days After Contract Award

10. **SUBMISSION FREQUENCY:** Monthly

11. **REMARKS:**

12. **INTERRELATIONSHIP:** The information within the data provided by this CPR DRD shall be reconcilable with the data provided in the Financial Management Report (533M/Q). To ensure an integrated approach to risk management, the information within the data provided by this CPR DRD shall be integrated with the Work Breakdown Structure (WBS), the Integrated Master Plan (IMP), Integrated Master Schedule (IMS), Risk Management Processes, Plans and Reports (where required), Probabilistic Risk Assessment Processes and Reports (where required) and risk identification and assessment in the Cost Analysis Data Requirement (CADRe).

13. **DATA PREPARATION INFORMATION:**

The Cost Performance Report shall be available for online viewing at any time during the effort by government using appropriately protected Internet/Intranet technologies.

The CPR shall be submitted monthly by the 10th working day of the month following the month being reported. The CPR shall include a table of contents with page numbers. Because of the distributed management control responsibilities within the NASA Program Office, NASA requires a separate submission of this report for each Task Order. Each report shall consist of Formats _____. Formats 1 and 5 shall display required information. Format 3 shall break out individual BCWS changes at the required level. Thresholds for variance analysis will be applied at the required level for schedule variance (current period and cumulative to date) and cost variance (current period, cumulative to date, and at completion). Those thresholds are as follows:

	Current Period	Cum-to-date	At Completion
Schedule Variance	X% and \$XK	X% and \$XK	
Cost Variance	X% and \$XK	X% and \$XK	X% and \$XK

The time increments to be used in Format 3 will correspond (within the limits of the contractor's disclosed fiscal calendar) with the government fiscal year.

13.1 **SCOPE:**

13.2 **APPLICABLE DOCUMENTS:**

DI-MGMT-81466, DID; NPD 9501.3A, Cost Estimating Handbook available at: www.ceb.nasa.gov

13.3 **CONTENTS:**

13.3.1. **Format.** Use the relevant DD Forms as listed above. All formats shall be submitted electronically in accordance with the following requirements. All formats shall be in a readable digital format (e.g., pdf files are not acceptable). The American National Standards Institute (ANSI) X12 standard (839 transaction set), the United Nations Electronic Data Interchange for Administration, Commerce and Transport (UN/EDIFACT) standard (PROCST message), the XML equivalent or any other equivalent or better electronic format shall be used to submit data electronically to the procuring activity. Contractor formats may be substituted whenever they contain all of the required data elements at the specified reporting levels and are compliant with the X12 standard, XML schema, or equivalent. On-line access to the data may be provided to augment formal CPR submission. (Note: Until the ANSI X12/XML standards are redefined to incorporate the changes to the forms, the new data elements shall be reported in Format 5.)

13.3.2. **Content.** The CPR shall contain the following:

13.3.2.1 **Heading Information** - Formats 1 - 5. Preparation instructions for Heading Information (Blocks 1 through 4) apply to Formats 1 through 5.

13.3.2.1.1 **Contractor.** Enter in Block 1.a the contractor's name and division (if applicable). Enter in Block 1.b the facility location and mailing address of the reporting contractor.

13.3.2.1.2 **Contract.** Enter the contract name in Block 2.a, the contract number (and the applicable Contract Line Item Number(s) (CLIN(s)) in Block 2.b, the contract type in Block 2.c, and the contract share ratio (if applicable) in Block 2.d.

13.3.2.1.3 **Program.** Enter in Block 3.a the program name, number, acronym, type, model, and series, or other designation of the prime item(s) purchased under the contract. Indicate the program phase

(development, production, etc.) in Block 3.b. Indicate whether the contractor's EVMS has been accepted by the Government and the date of the acceptance.

13.3.2.1.4 Report Period. Enter the beginning date in Block 4.a and the ending date in Block 4.b of the period covered by the report.

13.3.2.1.5 Security Classification. Enter the appropriate security classification at the top and bottom of each page.

13.3.2.1.6 Dollars in _____. If reported dollar amounts are in thousands, millions, or billions, enter the factor at the top of each page.

13.3.2.2 **Format 1 - Work Breakdown Structure**.

13.3.2.2.1 Contract Data.

13.3.2.2.1.1 Quantity. Enter in Block 5.a the number of principal items to be procured on this contract.

13.3.2.2.1.2 Negotiated Cost. Enter in Block 5.b the dollar value (excluding fee or profit) on which contractual agreement has been reached as of the cutoff date of the report. For an incentive contract, enter the definitized contract target cost. Amounts for changes shall not be included in this item until they have been priced and incorporated in the contract through contract change order or supplemental agreement. For a cost plus fixed fee, award fee, or incentive fee contract, enter the estimated cost negotiated. Changes to the estimated cost shall consist only of estimated amounts for changes in the contract scope of work, not for cost growth ("overrun") above the original estimated cost.

13.3.2.2.1.3 Estimated Cost of Authorized, Unpriced Work. Enter in Block 5.c the amount (excluding fee or profit) estimated for that work for which written authorization has been received, but for which definitized contract prices have not been incorporated in the contract through contract change order or supplemental agreement.

13.3.2.2.1.4 Target Profit/Fee. Enter in Block 5.d the fee or percentage of profit that shall apply if the negotiated cost of the contract is met. (See 13.3.2.2.1.2 above.)

13.3.2.2.1.5 Target Price. Enter in Block 5.e the target price (negotiated contract cost plus profit/fee) applicable to the definitized contract effort.

13.3.2.2.1.6 Estimated Price. Based on the most likely estimate of cost at completion for all authorized contract work and the appropriate profit/fee, incentive, and cost sharing provisions, enter in Block 5.f the estimated final contract price (total estimated cost to the Government). This number shall be based on the most likely management EAC in Block 6.c.1 and normally will change whenever the management estimate or the contract is revised.

13.3.2.2.1.7 Contract Ceiling. Enter in Block 5.g the contract ceiling price applicable to the definitized effort.

13.3.2.2.1.8 Estimated Contract Ceiling. Enter in Block 5.h the estimated ceiling price applicable to all authorized contract effort including both definitized and undefinitized effort.

13.3.2.2.1.9 Over Target Baseline/Over Target Schedule. Enter in Block 5.i the date the last over target baseline or over target schedule was implemented (if applicable).

13.3.2.2.2 Estimated Cost at Completion. These blocks shall present the contractor's range of estimated costs at completion. The range of estimates is intended to allow contractor management flexibility to express possible cost outcomes. Contractors shall provide the most accurate Estimates at Completion

(EACs) possible through program-level assessments of factors that may affect the cost, schedule, or technical outcome of the contract. Such program-level assessments shall include consideration of known or anticipated risk areas, and planned risk reductions or cost containment measures. EACs shall be reported without regard to contract ceiling.

13.3.2.2.2.1 Management Estimate at Completion - Best Case. Enter in Block 6.a.1 the contractor's best case EAC. The best case estimate is the one that results in the lowest cost to the Government. This estimate shall be based on the outcome of the most favorable set of circumstances. If this estimate is different from the most likely EAC (Block 6.c.1), the assumptions, conditions, and methodology underlying this estimate shall be explained briefly in Format 5. This estimate is for informational purposes only; it is not an official company estimate. This estimate should be based on the 25th percentile of the Interquartile Range latest risk-based LCCE required by the CADRe.

13.3.2.2.2.2. Management Estimate at Completion - Worst Case. Enter in Block 6.b.1 the contractor's worst case EAC. The worst case estimate is the one that results in the highest cost to the Government. This estimate shall be based on the outcome of the least favorable set of circumstances. If this estimate is different from the most likely EAC (Block 6.c.1), the assumptions, conditions, and methodology underlying this estimate shall be explained briefly in Format 5. This estimate is for informational purposes only; it is not an official company estimate. This estimate should be based on the 75th percentile of the Interquartile Range latest risk-based LCCE required by the CADRe.

13.3.2.2.2.3 Management Estimate at Completion - Most Likely. Enter in Block 6.c.1 the contractor's most likely EAC. This estimate is the contractor's official contract EAC and, as such, takes precedence over the estimates presented in Column (15) of Formats 1 and 2 and Blocks 6.a.1 and 6.b.1. This EAC is the value that the contractor's management believes is the most likely outcome based on a knowledgeable estimate of all authorized work, known risks, and probable future conditions. This value need not agree with the total of Column (15) (Block 8.e). However, any difference shall be explained in Format 5 in such terms as risk, use of Management Reserve (MR), or higher management knowledge of current or future contract conditions. The assumptions, conditions, and methodology underlying this estimate shall be explained briefly in Format 5. This EAC need not agree with EACs contained in the contractor's internal data, but must be reconcilable to them. The most likely EAC shall also be reconcilable to the contractor's latest statement of funds required as reported in the CFSR, or its equivalent, if this report is a contractual requirement.

13.3.2.2.2.4 Contract Budget Base. Enter in Block 6.c.2 the total of negotiated cost (Block 5.b) and estimated cost of authorized, unpriced work (Block 5.c).

13.3.2.2.2.5 Variance. Enter in Block 6.c.3 the Contract Budget Base (Block 6.c.2) minus the most likely estimate at complete (Block 6.c.1). This value shall be explained in Format 5 according to applicable contractual requirements.

13.3.2.2.3 Authorized Contractor Representative. Enter in Block 7.a the name of the authorized person (program manager or higher level designee) signing the report. Enter that person's title in Block 7.b. The authorized person shall sign in Block 7.c. Enter the date signed in Block 7.d. Electronic signatures are encouraged.

13.3.2.2.4 Performance Data.

13.3.2.2.4.1 Column (1) -Work Breakdown Structure Element. Enter in Column (1) of Block 8.a the noun description of the CWBS items for which cost information is being reported. CWBS elements and levels reported shall be those specified in the contract. (See f.1 above.)

13.3.2.2.4.2 Cost of Money. Enter in Columns (2) through (16) of Block 8.b the Facilities Capital Cost of Money applicable to the contract.

13.3.2.2.4.3 General and Administrative. Enter in Columns (2) through (16) of Block 8.c the appropriate General and Administrative (G&A) costs. If G&A has been included in the total costs reported in Block 8.a above, G&A shall be shown as a non-add entry on this line with an appropriate notation. However, if these contracts require CCDRs, contractors must report costs without G&A for CWBS elements reported in Block 8.a if DoD requests such information on an exception basis. If a G&A classification is not used, no entry shall be made other than an appropriate notation to that effect.

13.3.2.2.4.4 Undistributed Budget. Enter the amount of budget applicable to contract effort that has not yet been identified to CWBS elements at or below the reporting level. For example, if contract changes were authorized late in the reporting period, they should have received a total budget; however, assignment of work and allocation of budgets to individual CWBS elements may not have been accomplished as of the contractor's accounting period cutoff date. Budgets that can be identified to CWBS elements at or below the specified reporting level shall be included in the total budgets shown for the CWBS elements in Block 8.a and shall not be shown as Undistributed Budget (UB). Enter in Column (15) of Block 8.d the EAC for the scope of work represented by the UB in Column (14) of Block 8.d. Enter in Column (16) of Block 8.d the variance, if any, and fully explain it in Format 5. The reason(s) for UB shall be fully explained in Format 5.

13.3.2.2.4.4.1 Use of Undistributed Budget. UB is used to accommodate temporary situations where time constraints prevent adequate budget planning or where contract effort can only be defined in very general terms. UB shall not be used as a substitute for adequate contract planning. Formal budgets shall be allocated to contract effort and responsible organizations at the earliest possible time, preferably within the next reporting period.

13.3.2.2.4.5 Subtotal (Performance Measurement Baseline). In Columns (2) through (16) of Blocks 8.a through 8.e, enter the sum of the costs and budgets for direct, indirect, cost of money, and G&A. This subtotal represents the dollars in the allocated budget (less MR), which is the Performance Measurement Baseline (PMB) against which performance is measured.

13.3.2.2.4.6 Management Reserve. MR is an amount of the overall contract budget withheld for management control purposes and is held for program unknowns (realized risks on authorized work scope). Reserve is held for future needs and shall not be used to offset cumulative cost variances. It shall not be eliminated from contract prices by the Government during subsequent negotiations nor used to absorb the cost of contract changes. In Column (14) of Block 8.f enter the total amount of budget identified as MR as of the end of the current reporting period. The amounts shown as MR in Formats 1, 2, and 3 should agree. Amounts of MR applied to CWBS elements during the reporting period shall be listed in Block 6.b of Format 3 and explained in Format 5.

13.3.2.2.4.6.1 Negative Management Reserve. Negative entries shall not be made in Management Reserve (Column (14) of Block 8.f). There is no such thing as "negative MR." If the contract is budgeted in excess of the Contract Budget Base (the negotiated contract cost plus the estimated cost for authorized, unpriced work), the provisions applicable to formal reprogramming and the instructions in paragraphs 13.3. 2.2.5.1, 13.3. 2.2.6.6, 13.3.2.2.6.7, and 13.3.2.4.1.7 apply.

13.3.2.2.4.7 Total. Enter the sum of all direct, indirect, cost of money, and G&A costs, and UB and MR (if applicable) in Columns (2) through (14) of Block 8.g. The Total lines of Format 1 (Block 8.g) and Format 2 (Block 5.g) should agree. The total of Column (14), Block 8.g, should equal the Total Allocated Budget shown in Block 5.f on Format 3.

13.3.2.2.5 Reconciliation to Contract Budget Base.

13.3.2.2.5.1 Formal Reprogramming. In exceptional cases, the contractor with the approval of the Government may establish performance measurement budgets that exceed the Contract Budget Base. This process is called formal reprogramming. The contractor and the Government shall agree on how the results of a formal reprogramming will be reported in the CPR before the formal reprogramming is initiated. This agreement and any other pertinent details on the reporting of the formal reprogramming shall be included in Format 5. Blocks 9.a and 9.b are used to reconcile the higher performance measurement budgets, also called an "Over Target Baseline," to the Contract Budget Base. (See 13.3.2.2.6.6, 13.3.2.2.6.7, 13.3.2.4.1.7, and 13.3.2.6.5 below for more information on reporting Over Target Baselines (Formal Reprogramming).)

13.3.2.2.5.2 Variance Adjustment. In a formal reprogramming (Over Target Baseline), the contractor may: (1) apply the additional budget to completed work, thereby eliminating some or all of the existing cost or schedule variances, (2) apply the additional budget to remaining work, (3) apply some of the additional budget to completed work and some to remaining work, and/or (4) apply some of the additional budget to MR. If the contractor uses a portion of the additional budget to eliminate variances applicable to completed work, the total adjustments made to the cost and schedule variances shall be shown in Columns (10) and (11) of Block 9.a. The total cost variance adjustment entered in Column (11) of Block 9.a should be the sum of the individual cost variance adjustments shown in Column (12) of Block 8.g.

13.3.2.2.5.3 Total Contract Variance. In Columns (10) and (11) of Block 9.b, enter the sum of the cost and schedule variances shown on the Total line (Block 8.g) and on the Variance Adjustment line (Block 9.a). In Column (14) enter the Contract Budget Base from Block 6.c.2. In Column (15) enter the management EAC from Block 6.c.1. In Column (16) of Block 9.b enter the difference between Columns (14) and (15) of Block 9.b.

13.3.2.2.6 Columns (2) Through (16). When compliance with the ANSI/EIA-748 (current version in effect at time of contract award) is contractually required, the data in Columns (2) through (16) shall reflect the output of the contractor's ANSI/EIA-748 compliant integrated management system.

13.3.2.2.6.1 Column (2) and Column (7) - Budgeted Cost - Work Scheduled. For the time period indicated, enter the Budgeted Cost for Work Scheduled (BCWS) in these columns.

13.3.2.2.6.2 Column (3) and Column (8) - Budgeted Cost - Work Performed. For the time period indicated, enter the Budgeted Cost for Work Performed (BCWP) in these columns.

13.3.2.2.6.3 Column (4) and Column (9) - Actual Cost - Work Performed. For the time period indicated, enter the Actual Cost of Work Performed (ACWP) without regard to ceiling. In all cases, costs and budgets shall be reported on a comparable basis.

13.3.2.2.6.4 Column (5) and Column (10) - Variance – Schedule (i.e., accomplishment). For the time period indicated, these columns reflect the differences between BCWS and BCWP. For the current period column, Column (5) (schedule variance) is derived by subtracting Column (2) (BCWS) from Column (3) (BCWP). For the cumulative to date column, Column (10) (schedule variance) is derived by subtracting Column (7) (BCWS) from Column (8) (BCWP). A positive number in Column (5) and Column (10) indicates a favorable variance. A negative number (indicated by parentheses) indicates an unfavorable variance. Significant variances as specified in the contract shall be fully explained in Format 5. If the contract does not specify variance analysis thresholds, the contractor shall provide appropriate variance analyses. (See 13.3.2.6.3 below.)

13.3.2.2.6.5 Column (6) and Column (11) - Variance - Cost. For the time period indicated, these columns reflect the difference between BCWP and ACWP. For the current period column, Column (6) (cost variance) is derived by subtracting Column (4) (ACWP) from Column (3) (BCWP). For the cumulative to date column, Column (11) (cost variance) is derived by subtracting Column (9) (ACWP) from Column (8) (BCWP). A positive value indicates a favorable variance. A negative value (indicated by parentheses) indicates an unfavorable variance. Significant variances as specified in the contract shall be fully explained in Format 5. If the contract does not specify variance analysis thresholds, the contractor shall provide appropriate variance analyses. (See 13.3.2.6.3 below.)

13.3.2.2.6.6 Column (12a) and Column (12b) Reprogramming Adjustments - Cost Variance and Schedule Variance. Formal reprogramming (Over Target Baseline) results in budget allocations in excess of the Contract Budget Base and, in some instances, adjustments to previously reported variances. If previously reported variances are being adjusted, the adjustment applicable to each reporting line item affected shall be entered in Column (12a) if for a cost variance and Column (12b) if for a schedule variance. The total of Column (12a) and Column (12b) should equal the amount shown on the Variance Adjustment line (Block 9.a) in Column (10) and Column (11).

13.3.2.2.6.7 Column (13) Reprogramming Adjustments - Budget. Enter the total amounts added to the budget for each reporting line item as the result of formal reprogramming (Over Target Baseline). The amounts shown shall consist of the sum of the budgets used to adjust cost variances (Column (12)) plus the additional budget added to the CWBS element for remaining work. Enter the amount of budget added to MR in the space provided on the Management Reserve line (Block 8.f of Column (13)). The total of Column (13) should equal the budget amount by which the Total Allocated Budget exceeds the Contract Budget Base as shown in Block 5.g of Format 3. An explanation of the reprogramming shall be provided in Format 5.

13.3.2.2.6.7.1 Formal Reprogramming Reporting. Columns (12) and (13) are intended for use only in situations involving formal reprogramming (Over Target Baseline). Internal replanning actions within the Contract Budget Base do not require entries in these columns. Where contractors are submitting CPR data directly from automated systems, the addition of Columns (12) and (13) as shown may not be practical due to computer reprogramming problems or space limitations. In such cases, the information shall be provided in Format 5. Contractors shall not be required to abandon or modify existing automated reporting systems to include Columns (12) and (13) if significant costs will be associated with such change. Nor shall contractors be required to prepare the report manually solely to include this information.

13.3.2.2.6.7.2 Formal Reprogramming Timeliness. Formal reprogramming (Over Target Baseline) can be a significant undertaking that may require more than a month to implement. To preclude a disruption of management visibility caused by a reporting hiatus, formal reprogramming shall be implemented expeditiously. If a reporting hiatus is needed, the contractor and the Government shall agree on the date and duration of the hiatus before the formal reprogramming is initiated.

13.3.2.2.6.8 Column (14) - At Completion - Budgeted. Enter the budgeted cost at completion for the items listed in Column (1). This entry shall consist of the sum of the original budgets plus or minus budget changes resulting from contract changes, internal replanning, and application of MR. The total (Block 8.g) should equal the Total Allocated Budget shown in Block 5.f on Format 3.

13.3.2.2.6.9 Column (15) - At Completion - Estimated. Enter the latest revised estimate of cost at completion including estimated overrun/underrun for all authorized work. If the subtotal (Block 8.e) does not agree with the most likely management EAC (Block 6.c.1), the difference shall be explained in Format 5. (See 13.3.2.2.2.3 above.)

13.3.2.2.6.10 Column (16) - At Completion - Variance. Enter the difference between the Budgeted - At Completion (Column (14)) and the Estimated - At Completion (Column (15)) by subtracting Column (15) from Column (14). A negative value (indicated by parentheses) reflects an unfavorable variance. Significant variances as specified in the contract shall be fully explained in Format 5. If the contract does not specify variance analysis thresholds, the contractor shall provide appropriate variance analyses. (See 13.3.2.6.3 below.)

13.3.2.3 Format 2 - Organizational Categories.

13.3.2.3.1 Performance Data.

13.3.2.3.1.1 Column (1) - Organizational Category. In Block 5.a list the organizational categories that reflect the contractor's internal management structure. This format shall be used to collect organizational cost information at the total contract level for organizational elements rather than for individual CWBS elements. This column shall also identify each major subcontractor with EVM flowed down separately as an add item, at the cost to prime level (i.e., includes subcontractor fee, MR, UB, G&A, cost of money, etc.). This column shall also identify each major subcontractor and each major vendor separately as an add item. (Note: The separation of subcontractor efforts is for reporting purposes and not intended to impact how contracts are managed.) Except for material included in the add item for each major subcontractor or major vendor, the column shall also identify material separately as an add item. The level of detail to be reported normally will be limited to the organizational level immediately under the operating head of the facility. The contractor may report this information according to its own internal management structure. If the contractor is organized by product teams, this format may not be needed because it may resemble Format 1.

13.3.2.3.1.2 Cost of Money. Enter in Columns (2) through (16) of Block 5.b the Facilities Capital Cost of Money applicable to the contract.

13.3.2.3.1.3 General and Administrative. Enter in Columns (2) through (16) of Block 5.c the appropriate G&A costs. If G&A has been included in the total costs reported in Block 5.a above, G&A shall be shown as a non-add entry on this line with an appropriate notation. If a G&A classification is not used, no entry shall be made other than an appropriate notation to that effect. (See 13.3.2.2.4.3 above.)

13.3.2.3.1.4 Undistributed Budget. Enter in Column (14) of Block 5.d the budget applicable to contract effort that cannot be planned in sufficient detail to be assigned to a responsible organizational area at the reporting level. The amount shown on this format may exceed the amount shown as UB on Format 1 if budget is identified to a task at or below the CWBS reporting level but organizational identification has not been made; or may be less than the amount on Format 1 where budgets have been assigned to organizations but not to CWBS elements. Enter in Column (15) of Block 5.d the EAC for the scope of work represented by the UB in Column (14) of Block 5.d. Enter in Column (16) of Block 5.d the variance, if any, and fully explain it in Format 5. (See 13.3.2.2.4.4 above.)

13.3.2.3.1.5 Subtotal (Performance Measurement Baseline). Enter the sum of the direct, indirect, cost of money, and G&A costs and budgets in Columns (2) through (16) of Blocks 5.a through 5.e. (See 13.3.2.2.4.5 above.)

13.3.2.3.1.6 Management Reserve. In Column (14) of Block 5.f enter the amount of budget identified as MR. The Management Reserve entry should agree with the amounts shown in Formats 1 and 3. (See 13.3.2.2.4.6 above.)

13.3.2.3.1.7 Total. Enter the sum of all direct, indirect, cost of money, and G&A costs and budgets, UB, and MR (if applicable) in Columns (2) through (14) of Block 5.g. The totals on this page should

equal the Total line on Format 1. The total of Column (14) should equal the Total Allocated Budget shown in Block 5.f on Format 3.

13.3.2.3.2 Columns (2) Through (16). The instructions applicable to these columns are the same as the instructions for corresponding columns on Format 1. (See 13.3.2.2.6 and 13.3.2.2.6.1 through 13.3.2.2.6.10 above.)

13.3.2.4 **Format 3 - Baseline**.

13.3.2.4.1 Contract Data.

13.3.2.4.1.1 Original Negotiated Cost. Enter in Block 5.a the dollar value (excluding fee or profit) negotiated in the original contract. For a cost plus fixed fee, incentive, or award fee contract, enter the estimated cost negotiated. For an incentive contract, enter the definitized contract target cost.

13.3.2.4.1.2 Negotiated Contract Changes. Enter in Block 5.b the cumulative cost (excluding fee or profit) applicable to definitized contract changes that have occurred since the beginning of the contract.

13.3.2.4.1.3 Current Negotiated Cost. Enter in Block 5.c the sum of Blocks 5.a and 5.b. The amount shown should equal the current dollar value (excluding fee or profit) on which contractual agreement has been reached and should be the same as the amount in Negotiated Cost (Block 5.b) on Format 1.

13.3.2.4.1.4 Estimated Cost of Authorized, Unpriced Work. Enter in Block 5.d the estimated cost (excluding fee or profit) for contract changes for which authorization has been received from the contracting officer, but for which contract prices have not been incorporated in the contract, as shown in Block 5.c of Format 1.

13.3.2.4.1.5 Contract Budget Base. Enter in Block 5.e the sum of Blocks 5.c and 5.d.

13.3.2.4.1.6 Total Allocated Budget. Enter in Block 5.f the sum of all budgets allocated to the performance of the contractual effort. The amount shown shall include all MR and UB. This amount should be the same as that shown on the Total line in Column (14) on Format 1 (Block 8.g) and Format 2 (Block 5.g).

13.3.2.4.1.7 Difference. Enter in Block 5.g the difference between Blocks 5.e and 5.f. In most cases, the amounts shown in Blocks 5.e and 5.f will be identical. If the amount shown in Block 5.f exceeds that shown in Block 5.e, it usually is an indication of a formal reprogramming (Over Target Baseline). The difference shall be explained in Format 5 at the time the negative value appears and subsequently for any changes in the difference between Contract Budget Base and the Total Allocated Budget.

13.3.2.4.1.8 Contract Start Date. Enter in Block 5.h the date the contractor was authorized to start work on the contract, regardless of the date of contract definitization. (Note: Long-lead procurement efforts authorized under prior contracts are not to be considered.)

13.3.2.4.1.9 Contract Definitization Date. Enter in Block 5.i the date the contract was definitized.

13.3.2.4.1.10 Planned Completion Date. Enter in Block 5.j the completion date to which the budgets allocated in the PMB have been planned. This date represents the planned completion of all significant effort on the contract. The cost associated with the schedule from which this date is taken is the Total Allocated Budget (Block 5.f of Format 3).

13.3.2.4.1.10.1 Performance Measurement Schedule Inconsistent With Contractual Schedule. In exceptional cases, the contractor may determine that the existing contract schedule cannot be achieved and no longer represents a reasonable basis for management control. With Government approval, the contractor may rephase its performance measurement schedule to new dates that exceed the contractual milestones, a condition known as "Over Target Schedule." These new dates are for performance

measurement purposes only and do not represent an agreement to modify the contract terms and conditions.

13.3.2.4.1.10.2 Over Target Schedule Agreement. The Government and the contractor shall agree on the new performance measurement schedule prior to reporting it in the CPR. The contractor shall provide pertinent information in Format 5 on any schedule milestones that are inconsistent with contractual milestones, beginning the month the schedule is implemented and each month thereafter.

13.3.2.4.1.10.3 Indicators of a Performance Measurement Schedule Inconsistent With the Contractual Schedule. Formal reprogramming or internal replanning may result in performance measurement milestones that are inconsistent with the contractual milestones (Over Target Schedule). A difference between the planned completion date (Block 5.j) and the contract completion date (Block 5.k) usually indicates that some or all of the performance measurement milestones are inconsistent with the contractual milestones.

13.3.2.4.1.11 Contract Completion Date. Enter in Block 5.k the contract scheduled completion date in accordance with the latest contract modification. The cost associated with the schedule from which this date is taken is the Contract Budget Base (Block 5.e of Format 3).

13.3.2.4.1.12 Estimated Completion Date. Enter in Block 5.l the contractor's latest revised estimated completion date. This date represents the estimated completion of all significant effort on the contract. The cost associated with the schedule from which this date is taken is the "most likely" management EAC (Block 6.c.1 of Format 1).

13.3.2.4.2 Performance Data.

13.3.2.4.2.1 Column (1) -Performance Measurement Baseline (Beginning of Period). Enter in Block 6.a the time-phased PMB (including G&A) that existed at the beginning of the current reporting period. Most of the entries on this line (e.g., for Columns (4) through (9)) are taken directly from the PMB (End of Period) line on the previous report. For example, the number in Column (4) on the PMB (End of Period) line from the last report becomes the number in Column (3) on the PMB (Beginning of Period) line on this report. The number in Column (5) (End of Period) last report becomes Column (4) (Beginning of Period) on this report, etc. (if each of the two columns covers the same length of time).

13.3.2.4.2.2 Baseline Changes. In Block 6.b, list all significant baseline changes that have occurred during the reporting period. This listing shall include the contract changes and supplemental agreements authorized during the reporting period, allocations from MR and UB, and any significant rephasing of budgets. All significant authorized baseline changes shall be listed whether priced or unpriced.

13.3.2.4.2.3 Performance Measurement Baseline (End of Period). Enter in Block 6.c the time-phased PMB as it exists at the end of the reporting period. The difference between this line and the PMB (Beginning of Period) represents the effects of all significant changes, including the authorized changes, allocations of MR made during the period, and changes to time phasing due to internal replanning or formal reprogramming. The reasons for these changes shall be explained in Format 5.

13.3.2.4.2.4 Management Reserve. Enter in Block 7 the total amount of MR remaining as of the end of the reporting period. This value should agree with the amounts shown as MR in Formats 1 and 2.

13.3.2.4.2.5 Total. Enter in Column (16) of Block 8 the sum of Column (16) of Block 6.c (PMB (End of Period)) and Column (16) of Block 7 (Management Reserve). This amount should be the same as that shown on the Total line (Block 8.g) in Column (14) on Format 1.

13.3.2.4.3 Column (2) - BCWS - Cumulative To Date. On the PMB (Beginning of Period) line (Block 6.a), enter the cumulative BCWS as of the first day of the reporting period. This should be the same number reported as BCWS -Cumulative To Date on the Total line (Column (7) of Block 8.g) of Format 1 of the previous CPR. On the PMB (End of Period) line (Block 6.c), enter the cumulative BCWS as of the last day of the reporting period. This should be the same number reported as BCWS - Cumulative To Date on the Total line (Column (7) of Block 8.g) of Format 1 for this CPR.

13.3.2.4.4 Column (3) - BCWS For Report Period. On the PMB (Beginning of Period) line (Block 6.a), enter the BCWS planned for the reporting period. This should be the number in Column (4) on the PMB (End of Period) line (Block 6.c) on the previous CPR.

13.3.2.4.5 Columns (4) Through (14). Enter the names of each month for the contract period of performance in the headings of each of the Columns (4) through (9), and the names of the appropriate periods in the headings of each of the Columns (10) through (14) of Block 6. Columns beyond (14) may be added when necessary or desirable. In the PMB (Beginning of Period) line (Block 6.a), enter the BCWS projection reported in Format 3 of the previous CPR as PMB (End of Period) (Block 6.c). In the PMB (End of Period) line (Block 6.c) of this report, enter the projected BCWS by month for the next six months and for periodic increments (monthly, quarterly, or annually) thereafter for the remainder of the contract. The time phasing of each item listed in Column (1) of Block 6.b need not be shown in Columns (4) through (14). It is useful to show the time phasing of any baseline changes. (Note: For the purposes of illustration, Sample Format 3 has Columns (4) through (14) for reporting BCWS. The actual number of columns will vary from contract to contract.)

13.3.2.4.6 Column (15) - Undistributed Budget. On the PMB (Beginning of Period) line (Block 6.a), enter the number from Column (15) on the PMB (End of Period) line (Block 6.c) from the previous CPR. On the PMB (End of Period) line, enter the UB shown in Column (14) of Block 8.d on Format 1 of this report.

13.3.2.4.7 Column (16) - Total Budget. On the PMB (Beginning of Period) line (Block 6.a) enter the number from Column (16) on the PMB (End of Period) line (Block 6.c) from the previous CPR. In the section where baseline changes that occurred during the period are listed (Column (1) of Block 6.b), enter the amount of each of the changes listed. On the PMB (End of Period) line (Block 6.c), enter the sum of the amounts in the preceding columns on this line. On the Management Reserve line (Block 7), enter the amount of MR available at the end of the period. On the Total line (Block 8) enter the sum of the amounts in this column on the PMB (End of Period) line and the Management Reserve line. (Note: This should equal the amount in Block 5.f on this format and also the amount of the Total line in Column (14), Block 8.g, of Format 1.)

13.3.2.5 Format 4 - Staffing.

13.3.2.5.1 Performance Data. For those organizational categories shown in Column (1) of Block 5, equivalent months shall be indicated for the current reporting period (Column (2)), cumulative through the current period (Column (3)), forecast to completion (Columns (4) through (14)), and at completion (Column (15)). Direct equivalent months shall be shown for each organizational category for the contract. An equivalent month is defined as the effort equal to that of one person for one month. Values shall be reported in whole numbers. (Note: Partial months, .5 and above, shall be rounded to 1; below .5 to 0.) When the Government and the contractor agree, staffing may be reported in equivalent days or hours.

13.3.2.5.1.1 Column (1) -Organizational Category. In Block 5, list the organizational categories that reflect the contractor's internal management structure. Format 4 categories may differ from those reported in Format 2. If the Government needs different categories in Formats 2 and 4, the Format 4 categories shall be addressed during negotiations. (See f.4 above.)

13.3.2.5.1.2 Total Direct. In Block 6, Columns (2) through (15), enter the sum of all direct equivalent months for the organizational categories shown in Column (1).

13.3.2.5.2 Column (2) - Actual - Current Period. Enter the actual equivalent months incurred during the current reporting period.

13.3.2.5.3 Column (3) - Actual End of Current Period (Cumulative). Enter the actual equivalent months incurred to date (cumulative) as of the end of the reporting period.

13.3.2.5.4 Columns (4) Through (14) - Forecast (Non-Cumulative). Enter the names of each month for the contract period of performance in the headings of each of the Columns (4) through (9), and the names of the appropriate periods in the headings of each of the Columns (10) through (14) of Block 5. Enter a staffing forecast by month for the next six months and for periodic increments (monthly, quarterly, or annually) thereafter for the remainder of the contract. The staffing forecast shall be updated as part of the formal EAC process followed by the contractor. The staffing forecast shall reflect the same staffing estimate used as the basis for the EAC in Column (15) on both Format 1 and Format 2. (Note: For the purposes of illustration, Sample Format 4 has Columns (4) through (14) for reporting staffing forecast. The actual number of columns will vary from contract to contract.) 2.5.5 Column (15) - Forecast at Completion. Enter the estimate of equivalent months necessary for the total contract in Column (15) by organizational category. This estimate shall be consistent with the “most likely” management EAC shown in Column (15) of Block 8.e of Format 1. Any significant change in the total number of equivalent months at completion of the contract (i.e., Column (15) Total) shall be explained in Format 5.

13.3.2.6 **Format 5 - Explanations and Problem Analyses.**

13.3.2.6.1 General. Format 5, Explanations and Problem Analyses, is a narrative report prepared to amplify and explain data in the other CPR formats. Format 5 shall normally address the following: (1) contractually required cost, schedule, and EAC variance analyses, (2) MR changes and usage, (3) UB contents, (4) differences between the best case, worst case, and most likely management EAC, if any, (5) the difference between the most likely management EAC and the estimate in Block 8.e of Column (15), if any, (6) significant differences between beginning of period PMB time phasing and end of period PMB time phasing in Format 3, (7) performance measurement milestones that are inconsistent with contractual milestones (Over Target Schedule), (8) formal reprogramming (Over Target Baseline) implementation details, and (9) significant staffing estimate changes in Format 4. Any other topic relevant to contract cost, schedule, or technical performance may be addressed in this format. The date(s) of the Integrated Baseline Review(s) may also be addressed in this format. Contractors may elect to attach subcontractor Format 5 reporting and cross reference this analysis in the Format 5 reporting submitted to the Government to gain time efficiencies and meet submission dates.

13.3.2.6.2 Total Contract. Provide a summary analysis that identifies significant problems affecting performance. Indicate corrective actions required, including Government action where applicable. Significant changes since the previous report shall be highlighted. Discuss any other issues affecting successful attainment of contract cost, schedule, or technical objectives that the contractor deems significant or noteworthy. This section is brief, normally one page.

13.3.2.6.3 Cost and Schedule Variances. Explain all variances that exceed specified variance thresholds. Explanations of variances shall clearly identify the nature of the problem, significant reasons for cost or schedule variance, effect on the immediate task, impact on the total contract, and the corrective action taken or planned. Explanations of cost variances shall identify amounts attributable to rate changes separately from amounts applicable to hours worked; amounts attributable to material price changes separately from amounts applicable to material usage; and amounts attributable to overhead rate changes separately from amounts applicable to overhead base changes or changes in the overhead allocation basis. To reduce the volume of variance analysis explanations, the contractor may refer to a prior CPR's variance analysis explanations if the explanation for the current CPR's variance has not changed significantly. Explanations of schedule variances and the impact on the contract shall be performed in parallel with the schedule analysis called out by the IMS DID. Accordingly, there is a requirement in b. above for the IMS DID, DI-MGMT-81650, to be used in conjunction with this DID. (See 13.3.2.2.6.4 and 13.3. 2.2.6.5 above.)

13.3.2.6.3.1 Setting Variance Analysis Thresholds. In Format 5, the Government will require only that amount of variance analysis that satisfies its management information needs. Excessive variance analysis is burdensome and costly, and detracts from the CPR's usefulness, while too little information is equally undesirable.

13.3.2.6.4 Other Analyses. In addition to variance explanations, the following analyses are mandatory:

13.3.2.6.4.1. Management Estimate at Completion. If the best or worst case management EACs differ from the most likely estimate (Column (1) of Block 6 of Format 1), a brief explanation of the difference shall be provided. Also, if the most likely management EAC differs from the total entered in Column (15) of Format 1 or 2, the difference shall be explained. The explanations shall focus on such areas as a knowledgeable, realistic risk assessment; projected use of MR; estimate for UB; and higher management's knowledge of current or future contract conditions. The assumptions, conditions, and methodology underlying all management EACs shall be explained. (See 13.3.2.2.2 to 13.3.2.2.2.3, 13.3.2.2.2.5, 13.3.2.2.6.9, and 13.3. 2.2.6.10 above.) The reasons for significant shifts in time phasing of the EAC shall also be explained.

13.3.2.6.4.2 Undistributed Budget. Identify the effort to which the UB applies. Also, explain any variance between the UB and the estimate for UB in Formats 1 and 2. (See 13.3.2.2.4.4 and 13.3.2.3.1.4 above.)

13.3.2.6.4.3 Management Reserve Changes. Identify the sources and uses of MR changes during the reporting period. Identify the CWBS and organizational elements to which MR is applied, and the reasons for its application. (See 13.3.2.2.4.6 above.)

13.3.2.6.4.4 Baseline Changes. Explain reasons for significant shifts in time phasing of the PMB shown on Format 3. (See 13.3.2.4.2.3 above.)

13.3.2.6.4.5 Staffing Level Changes. Explain significant changes in the total staffing EAC shown on Format 4. Also, explain reasons for significant shifts in time phasing of planned staffing. (See 13.3.2.5.5 above.)

13.3.2.6.5 Formal Reprogramming (Over Target Baseline). If the difference shown in Block 5.g on Format 3 becomes a negative value or changes in value, provide information on the following:

13.3.2.6.5.1 Authorization. Procuring activity authorization for the baseline change that resulted in negative value or change.

13.3.2.6.5.2 Reason. A discussion of the reason(s) for the change.

13.3.2.6.5.3 CPR Reporting. A discussion of how the change affected CPR reporting (i.e., amount allocated to MR, adjustments to cost or schedule variances, etc.). (See 13.3.2.4.1.7, 13.3.2.2.5.1, and 13.3. 2.2.6.7 above.)

13.3.2.6.5.4 Schedule. Indicate whether the contract schedule was retained for performance measurement or was replaced with a schedule that exceeds the contractual schedule (Over Target Schedule).

13.3.2.6.6 Over Target Schedule. If a performance measurement schedule exceeding the contractual schedule (Over Target Schedule) has been implemented, provide a discussion of the pertinent information, such as authorization, reasons, and significant dates. (See 13.3.2.4.1.10.1 above.)

For program management and cost calibration purposes monthly, the Contractor shall classify and document all cost growth as either 'risk-driven cost & schedule growth' or 'externally-driven cost & schedule growth' in Format 5 as source information for the CADRe. The source of this information shall be at the Control Account level, however, the consolidation and customer reporting can be done at higher levels within the performing organization.

'Risk-Driven Cost & Schedule Growth' (RDCG & RDSG) is that cost and schedule growth caused by overruns and funded or unfunded changes, linked to technical risk categories originally used to identify cost-risk in the cost estimate (e.g., technology, complexity, schedule, design/engineering, manufacturing, integration, etc) and key engineering performance parameters (e.g., dynamic load resistance, operating voltage, radiation resistance, emissivity, etc.).

'Externally-Driven Cost & Schedule Growth' (EDCG & EDSG) is that cost and schedule growth caused by overruns and funded or unfunded changes, linked to external factors (e.g., requirements changes, technical enhancements not driven by risk, perturbations to budgets by external agents causing schedule changes, etc.) over which the contractor has little, if any, control. (NOTE: The EDCG & EDSG drivers shall be specifically identified in variance analysis reporting)

13.4 **FORMAT:**

CPR formats shall be completed according to the instructions outlined in this DRD:

8.1.1.1.

<u>CPR Format</u>	<u>DD Form Number</u>	<u>Sample Format No.</u>
Work Breakdown Structure	2734/1	1
Organizational Categories	2734/2	2
Baseline	2734/3	3
Staffing	2734/4	4
Explanations and Problem Analyses	2734/5	5

Those Forms are reproduced at the end of this document. Contractor formats shall be substituted for CPR formats whenever they contain all the required data elements at the specified reporting levels in a form suitable for NASA management use. Electronic submission to the government project office shall be utilized in accordance with the American National Standards Institute (ANSI) X12 standards (transaction sets 839 for cost and 806 for schedule), or the United Nations Electronic Data Interchange for Administration, Commerce and Transport (EDIFACT) equivalent, or any other acceptable equivalent electronic application will be used for Electronic Data Interchange. Distribution of the ANSI transaction sets shall be made to the program authorized repository.

13.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue.

Forms:

Right Click and Choose “Open WebLink In Browser” to download the latest form in Acrobat PDF Format.

1. DD FORM 2734/1, AUG 96 Cost Performance Report
Format Work Breakdown Structure. [Click Here](#)
2. DD FORM 2734/2, AUG 96 Cost Performance Report
Format 2 – Organizational Categories [Click Here](#)
3. DD FORM 2734/3, AUG 96 Cost Performance Report
Format 3 – Baseline [Click Here](#)
4. DD FORM 2734/4, AUG 96 Cost Performance Report
Format 4 – Staffing [Click Here](#)
5. DD FORM 2734/5, AUG 96 Cost Performance Report
Format 5 – Explanations & Problem Analyses [Click Here](#)

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